

DETERMINATION OF PLANTS COLLECTED IN COLOMBIA BY F. W. PENNELL

in 1917 (including Rusby & Pennell).

- Pennell 84. *Boerhaavia erecta* L.
115. *Rivina humilis* L.
363. *Chamissoa altissima* (Jacq.) H. B. K.
501. *Drymaria cordata* (L.) Willd.
545. *Bocconia frutescens* L.
559. *Arenaria lanuginosa* (Mx.) Rohrb.
607. *Coriaria thymifolia* Willd.
622. *Drymaria cordata* (L.) Willd.
642. *Ranunculus praemorsus* DC.
644. *Drymaria gracilis* C. & S.
691. *Passiflora mollissima* (H. B. K.) Bailey.

698. *Hedyosmum bonplandianum* H. B. K.

715. *Cardamine flaccida* C. & S.
742. *Muhlenbeckia tamnifolia* (H. B. K.) Meisn.
802. *Hedyosmum scabrum* (R. & P.) Solms.
811. *Clematis dioica* L.?
1057. *Weinmannia crenata* Presl.
1130. *Hirtella paniculata* Sw.
1267. *Alchemilla aphanoides* Mutis.
1267a. " " "
1275. *Acaena elongata* L.
1284. *Muhlenbeckia tamnifolia* (H. B. K.) Meisn.
1322. *Arenaria lanuginosa* (Mx.) Rohrb.
1563. *Drymaria cordata* (L.) Willd.
1567. *Microtea debilis* Sw.
1733. *Drymaria gracilis* C & S.
1742. *Valeriana gracilis* Benth.
1755. " " "
1776. *Arenaria lanuginosa* (Mx.) Rohrb.
1897. *Drimys winteri* Forst.
1928. *Sisymbrium solidagineum* Tr. & Pl.
1954. *Cardamine ovata* Benth.
1987. *Cerastium glutinosum laxum* Tr. & Pl.
2078. " " "
2084. *Alchemilla nivalis* H. B. K.
2117. *Muhlenbeckia tamnifolia* (H. B. K.) Meisn.
2160. *Ranunculus bonariensis* Poir.
2170. " *flagelliformis* Sm.
2186. " *peruvianus* Pers.
2232. *Alchemilla nivalis* H. B. K.
2252. *Valeriana mutisiana* (Wedd.) Hoeck.
2253. *Berberis glauca* H. B. K.
2267. *Acaena cylindrostachya* R. & P.
2284. *Altermanthera mexicana* (Schl.) Hieron.
2314. *Ranunculus flagelliformis* Sm.
2326. " " "

- Pennell 2368. *Weinmannia tomentosa* L. f.
2378. *Valeriana crassifolia* H. B. K.
2398. *Thalictrum podocarpum* DC.
2401. *Hedyosmum scabrum* (R. & P.) Solms.
2441. *Clematis sericea* H. B. K.
2561. *Cardamine ovata* Benth.
2710. *Astrepbia chaerophylloides* DC.
2719. *Arenaria lanuginosa* (Mx.) Rohrb.
2834. *Hemistylis velutina* Wedd.
2950. *Alchemilla aphanoides* Mutis.
2960. *Cardamine jamesonii* Hook.
2981. *Ranunculus praemorsus* DC.
2963. *Drimys winteri* Forst.
2972. *Alchemilla orbiculata* R. & P.
2976. *Cardamine flaccida* C. & S.
2982. *Acaena ovalifolia* R. & P.
2984. *Colignonia ovalifolia* Heimerl.
3016. *Alchemilla nivalis* H. B. K.
3025. " " "
3031. *Cerastium floccosum* Benth.
3032. *Draba cheiranthoides* Hook. f. ~~var.~~ ?
3034. *Cerastium glutinosum* H. B. K.
3035. *Draba pachythrysus* Tr. & Planch.
3049. *Valeriana plantaginea* H. B. K.
3050. *Valeriana plantaginea* H. B. K.
3052. *Cerastium willdenovii* H. B. K.
3054. *Ranunculus peruvianus* Pers.
3080. *Phrygilanthus corymbosus* (Dietr.) Eichl.
3118. *Cardamine ovata* Benth.
3169. *Alchemilla aphanoides* Mutis.
3196. *Passiflora parritae* (Mast.) Bailey.
3202. *Hedyosmum goudotianum* Solms.
3221. *Iresine celosia* L.
3244. *Drymaria gracilis* C. & S.
3637. *Hirtella paniculata* Sw.
3692. *Iresine celosia* L.
3717. *Helianthium tenellum* (Mart.) Britton.
3876. *Boerhaavia coccinea* Mill.
4200. *Iresine celosia* L.
4674. *Glinus radiatus* R. & P.
4705. *Alternanthera polygonoides* (L.) R. Br.

November 19, 1924.

Grav.

PLANTS COLLECTED IN COLOMBIA BY F. W. PENNELL, 1917-1918
(including Rusby & Pennell).

88. *Sida acuta* Burm.
93. *Cuscuta americana* congesta.
139. *Turnera ulmifolia* L.
209. " "
298. *Paullinia fuscescens*.
337. *Turnera ulmifolia* L.
392. *Phyllanthus diffusus* Kl.
400. *Psidium araca* Raddi.
436. *Myrcia xylopoides* (H. B. K.) DC.
476. *Melochia hirsuta* Cav.
494. *Pavonia mollis* H. B. K.
496. *Melochia venosa* Sw.
581. *Phyllanthus lathyroides* H. B. K.
766. *Bomarea setacea* (R. & P.) Herb.
771. *Juncus bogotensis* H. B. K.
1110. *Myrcia xylopoides* (H. B. K.) DC.
1139. *Chamaesyce densiflora* (Kl.).
1187. " *lasiocarpa* Kl.
1216. *Oenothera multicaulis tarquencis* (H. B. K.) Munz &
Johnston.
1379. *Helicteres guazumaefolia* H. B. K.
1453. *Cuscuta corniculata* Engl. (Det. T. G. Yuncker)
1481. *Myrcia lanceolata* Camb. (Leaves broader but otherwise
typical.)
1495. *Phyllanthus carolinensis* Walt.
1712. *Myrcia lanceolata* Camb.
1743. *Sclerothrix fasciculata* Presl.
1753. *Melochia lupulina* Sw.
1773. *Psidiopsis moritziana* Berg.
1794. *Melochia lupulina* Sw.
1800. *Sclerothrix fasciculata* Presl.
1809. *Polygala gracilis* H. B. K.
1811. *Bomarea ovata* (Cav.) Mirb.
1819. *Bomarea multiflora* (L. f.) Mirb.
1917. *Ugni myricoides* (H. B. K.) Berg.
1925. *Bomarea frondosa* Mast.
1946. *Plagiocheilus bogotensis* (H. B. K.) Wedd.
1947. *Geranium hirtum* Willd.
1990. *Juncoides racemosum* (Desv.) Kuntze.
2032. *Bomarea caldasii* (H. B. K.) Aschers. & Graebn.
2049. *Juncus brunneus* Buchenau?
2058. *Geranium multiceps* Turcz.
2066. *Geranium cucullatum* elongatum Wedd.
2079. *Juncoides giganteum* (Desv.) Sheldon.
2133. *Juncus bogotensis* H. B. K.
2134. " *microcephalus* H. B. K.
2159. *Scutellaria racemosa* Pers.

2166. *Juncus imbricatus* LaHarpe.
2184. *Parosela mutisii* (H. B. K.).
2215. " " "
2258. *Myrteola oxyccoides* (Benth.) Berg.
2299. *Geranium hirtum* Willd.
2309. *Jussiaea repens* L.
2330. *Oenothera multicaulis tarquensis* (H. B. K.) Munz &
Johnston. (Det. Munz & Johnston)
2337. *Phyllanthus salviaefolius* H. B. K.
2430. *Vallea stipularis* Mutis.
2511. *Juncus densiflorus* H. B. K.
2512. " *microcephalus* H. B. K.
2557. " *bufonius* L.
2558. " *imbricatus* LaHarpe.
2592. *Romarea hispida* Baker.
2660. *Cunnera pilosa* H. B. K.
2757. *Pavonia sidifolia* H. B. K.
2805. " *dasyptala* Turcz.
2899. *Chamaesyce hyssopifolia* (L.).
2915. *Cracca leptostachya* (DC.) Rusby.
2919. *Phyllanthus diffusus* Kl.
2935. *Crotalaria pterocaula* Desv.
2964. *Ceranium columbianum* Knuth.
2969. *Juncus involucratus* Steud.
2973. *Geranium columbianum* Knuth.
2981. " *hirtum* Willd.
3028. *Juncoides peruvianum* (Desv.) Kuntze?
3105. " *giganteum* (Desv.) Sheldon.
3187. *Bomarea multiflora* (L. f.) Mirb.
3223. *Acalypha macrostachya* Jacq.
3234. *Bomarea krauzlinii* Baker?
3249. *Melochia lupulina* Sw.
3305. *Phyllanthus lathyroides* H. B. K.
3322. *Loasa triphylla papaverifolia* (H. B. K.) Urb. & Gilg.
3345. *Sida glutinosa* Commers.
3382. *Phyllanthus lathyroides* H. B. K.
3459. *Melochia hirsuta* Cav.
3532. *Phyllanthus diffusus* Kl.
3533. *Chamaesyce hyssopifolia* (L.).
3609. " *densiflora* (Kl.).
3659. *Melochia hirsuta* Cav.
3661. *Turnera ulmifolia* L.
3746. *Acalypha diversifolia* Jacq.
3792. *Chamaesyce lasiocarpa* Kl.
3986. *Melochia nodiflora* Sw.
4060. *Parosela barbata* (Oerst.) Rydb.
4074. *Melochia lupulina* Sw.
4111. *Acalypha macrostachya* Jacq.
4124. *Teucrium palustre* H. B. K.
4180. *Acalypha diversifolia* Jacq.
4256. *Bomarea angustipetala* (Benth.) Baker.
4309. " *crassifolia* Baker.
4619. *Teucrium palustre* H. B. K.

Rusby-Pennell

Bosleria.

(det. C. V. Morton)

- 1367. impressa Morton
- 2417. reticulata var. venosa Morton
- 2665. reticulata Fritsch
- 2666. " var. venosa Morton
- 3400. solanoides H.B.K.
- 4382. microphylla var. serrulata Morton type

RUSBY & PENNELL -- COLOMBIA

G

300. *Carica goudotiana* Planch. & Tr.
 576. *Begonia holtonis* A. DC.
 717. " *tovarensis* Kl.
 1537. " *macra* A. DC.
 1674. *Vismia rufescens* (Lam.) Pers.
 1926. *Begonia urticae* L. f.
 2440. " *ferruginea* L. f.
 2543. " *tovarensis* Kl.
 2653. *Begonia foliosa* H.B.K.
 2925. *Ouratea magdalena* (Tr. & Pl.) Engl.
 2984. *Colignonia ovalifolia* Heimerl (*det. Standley*)
 3284. *Begonia holtonis* A. DC.

V. COLLECTIONS OF RUSBY & PENNELL IN COLOMBIA, 1917-1918

- 437 *Miconia rufescens* (Aubl.) DC.
 ✓399 " *albicans* (Sw.) Triana
 694 " *theaezans* (Bonpl.) DC.
 792 " *floribunda* Naud.
 791 " *minuta* Gleason, n.sp.
 19818 " *floribunda* Naud.
 813 " *aggregata* Gleason, n.sp.
 1982 " " " " " " " " " "
 ✓1011 " *rufescens* (Aubl.) DC.
 831 " *cuneifolia* Gleason, n.sp.
 1080 " *stenostachya* (Schr. & Mart.) DC.
 1088 " *albicans* (Sw.) Triana
 ✓1310 " *ligustrina* (Smith) Triana
 1361 " *macrophylla* (D. Don) Triana
 ✓1283 " *ligustrina* (Smith) Triana
 1404 " *rufescens* (Aubl.) DC.
 1511 " *minutiflora* (Bonpl.) DC.
 1677 " *theaezans* (Bonpl.) DC.
 ✓1971 " sp.
 2094 " *ligustrina* (Smith) Triana
 2121 " *cataractae* Triana
 2172 " *reclinata* (Bonpl.) Naud.
 ✓2211 " *ligustrina* (Smith) Triana
 2418 " *stipularis* Naud.
 ✓2739 " *spicellata* Bonpl.
 ✓2851 " *albicans* (Sw.) Triana
 ✓2852 " *acinodendrum* (L.) Triana
 2894 " *stenostachya* (Schr. & Mart.) DC.
 ✓3078 " *salicifolia* (Bonpl.) Naud.
 ✓3152 " sp.
 3441 " *barbinervis* (Benth.) Triana
 ✓3525 " *albicans* (Sw.) Triana
 4392 " sp.

Pennell 3487. *Bleparodon minimum* Woodson (type)
 Pennell. 1587. *Mascagnia volubilis* (Sims) Ndz.

" 3560. *Hiraea ternifolia granatensis* vulgaria Ndz. *det. C. J. Morton*
 " 4033. *Mascagnia dumetorum* Morton (type)

Pennell-Colombia

3336. *Dioscorea flaccida* Knuth (type) *det. R. Knuth*

Rusby & Pennell - 1917

775. *X. columbiana* Malme (but not typical)
1409. *X. lacerata* Pohl
2202. *X. acutifolia* (Heimerl) Malme

(Det. Malme)

Xyris RUSBY & PENNELL -- COLOMBIA

391. *Iresine argentata* (Mart.) D. Dietr. (Det. Standley)
1092. " " " "
1659. *Pfaffia iresinoides* (H.B.K.) Spreng.
1828. " *Dunaliana* (Moq.) Standl.
1886. *Alternanthera elongata* (Willd.) Standl.
1957. " *lanceolata* (Benth.) Standl.
2284. " *porrigens* (Jacq.) Kuntze?
3879. *Amaranthus dubius* Mart.
4668. " " "
4705. *Alternanthera polygovooides* (L.) R. Br.

Colombia, Rusby and Pennell, 1917--1918

- 480-A, 499-A *Tibouchina ciliaris* (Vent.) Cogn.
500-A *Aciotis paludosa* (Mart.) Triana
523-A *Tibouchina longifolia* (Vahl) Baill.
568, 569 *Monochaetum Bonplandii* (Kunth) Naud.
684 *Monochaetum meridense* Naud.
723 *Tibouchina lepidota* (Bonpl.) Baill.
736 *Monochaetum meridense* Naud.
✓804 " *villosum* Gleason, n. sp.
820 949 " *meridense* Naud.
✓943 " *Bonplandii* (Kunth) Naud.
968 " "
981 " "
1051 *Tibouchina gracilis* (Bonpl.) Cogn.
✓1123 *Clidemia capitellata* (Bonpl.) D. Don
1423 *Poteranthera minor* Gleason, n. sp.
1467 *Siphonthera alsinoides* Gleason, n. sp.
1510 *Olidemia cymosa* Gleason, n. sp.
18 49 *Tibouchina ciliaris* (Vent.) Cogn.
✓2449 *Monochaetum coronatum* Gleason, n. sp.
3332 *Tibouchina ciliaris* (Vent.) Cogn.
✓3466 *Clidemia capitellata* (Bonpl.) D. Don
✓3470 *Meriania barbinervis* Naud.
4447 *Tococa platyphylla* Benth.
4466 *Blakea fasciculata* Gleason, n. sp.
4546 *Triolena hirsuta* Triana

- Pennell
- ✓ 1423. *Dichromena parvula* B. & K.
 - 1501. " " "
 - 3216. " *polystachya* Purrill
 - ✓ 12499. *Rhaphithamnus cyanocarpus* (Bert.) Miers (det. Moldenke)
 - ✓ 14440. *Cynanchum eurystephanum* Malme (type)

Syngenesia F. W. Pennell, Colombia

- 2019. *S. abirtimus* Willd.
- 2047. *S. chinogenetum* Wedd. forma *macrocephalus* Hieron
- 2051. *S. subruncinatus* (Wedd.) Greenman
- 2055. *S. stuebelii* Hieron
- 2971. *S. patens* (HBK.) DC.
- 2985. *S. sylviculus* Greenman, sp. nov.
- 3002. *S. weddellianus* Hieron
- 3033. *S. latiflorus* Wedd.
- 3076. *S. andicola* Turez

det. I. M. S.

Hydrocotyle.

Det. Mildred E. Mathias, 1933.

Pennell-Colombia.

- 2799. *H. pusilla* A. Rich
- 3204. *H.* "
- 2624. *H. tenerrima* Rose (type)
- ✓ 6592. *H. Humboldtii* A. Rich
- ✓ 9202. *H.* "
- 2945. *H. hederacea* Mathias

Pennell (Rusby & Pennell). Colombia

- 1950. *Cestrum petiolare* H.B.K. (Det. Morton)
- 2349. " *mutisii* Willd. " "
- 3884. *Rynchospora corymbosa* (L.) Britton
- 4153. *Tradescantia elongata* G.F.W. Mey.
- 4214. *Hybanthus prunifolius* (H.B.K.) Schultze
- 3522. *Cassaria silvestris* Sw. (Det. Sleumer)

5J

Current South American Collections identified by H. Sleumer.

Reported by U. S. National Museum, March 1936.

Rusby & Pennell-Pennell

- ✓ 748. *Vaccinium meridionale* Sw.
- ✓ 749. " "
- 840. " *floribundum ramosissimum* (Dunal) Sleumer
- ✓ 2060. " " "
- 2598. " " H.B.K.
- ✓ 4262. " " *marginatum* (Dunal) Sleumer and V. *corymbo-dendron* Dunal

Pennell, Colombia 1917.

~~Julocroton~~ hons

171. *Julocroton hondensis* (Karst.) Muell. Arg.
511. *Siparuna sessiliflora* (H. B. K.) DC. (Det. A. C. Smith)
970. *Inga corucans* Willd.? im, September 1933.
1420. *Eriosema simplicifolium* (~~author?~~) G. Don
1850. *Mucuna sloanei* Fawc. & Rendle (correction)
3936. *Pithecolobium lanceolatum* (H. & B.) Benth.
4159. *Inga vera* Willd.
4792. *Priva lappulacea* (L.) Pers.

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2538. *Cyperus aschenbornianus* Boeck. (correction)
3032. *Draba pennell-hazenii* O. E. Schulz (det. O. E. Schulz)
3165. *Juanulloa speciosa* (Miers) Dun.
3295. *Costus sanguinens* Donn. Sm. (det. Rowlee in N. Y. B. G.)
3304. " *nutans* K. Sch. " " " "
3437. *Albizia carbonaria* Britton (det. Britton)
3633. *Scleria latilacunosa* Kukenth. (det. Core)
4203. *Cyperus chalananthus* Presl (correction)
4009. *Chamaecrista schlimii* (Benth.) B. & R.
4653. *Cyperus chalananthus* Presl (correction)
4698. *Brownea stenantha* Britton & Killip (type)

Rusby & Pennell, Colombia

- 905, 2665. *B. eleria* *reticulata* Fritsch
1367. *B. leucostoma* (Hook.) Hanst.
2666, 2417. *B. nitens* Fritsch
3400. *B. acutifolia* Benth.
4382. *B. microphylla* Fritsch

Rusby & Pennell, Colombia.

Malpighiaceae determined by C. V. Morton; others by E. P. Killip
unless otherwise noted.

U. S. National Museum, December 1934.

- 134, 3617, 2813. *Galactia velutina* Benth.
222. *Bunchosia glauca* H.B.K.
319. *Banisteriopsis cornifolia* (H.B.K.) C. B. Rob.
338. *Tetrapteris huilensis* Morton (type)
640, 834, 999. *Clusia multiflora* H.B.K. (Det. A. C. Smith)
891. *Aphelandra acanthus* Nees (sct. *fernand*)
1136. *Banisteria suberosa candolleana* (Juss.) Morton
1141. " *purpurea puberula* (Ndz.) Morton
1390. *Mandevilla subsagittata* (R. & P.) Woods. (Det. Woodson)
1403. *Vismia lauriformis* (Lam.) Choisy (Det. A. C. Smith)
1420. *Eriosema simplicifolium* (H.B.K.) Walp.
1512. *Tetrapteris calcphylla* Juss.
1642. *Phaseolus linearis* H.B.K.
1840. *Galactia velutina* Benth.
1879. *Cologania ovalifolia* H.B.K.
2470. " " "
2743. *Galactia velutina* Benth. (form)
2820, 2838. *Banisteriopsis cornifolia* (H.B.K.) C. B. Rob.
2829. *Dioclea paniculata* Killip
2874. *Heliconia robusta* Pax (Det. Griggs)
2929. *Banisteriopsis cornifolia* (H.B.K.) C. B. Rob.
3243. *Calopogonium galactioides* (H.B.K.) Benth.
3427. *Oryctanthus ruficaulis* (P. & E.) Eichl. (Det. A. C. Smith)
3438. *Mesechites brevipes* (Benth.) Muell. Arg. (Det. Woodson)
3513. *Galactia velutina* Benth.
3610. *Machaerium tolimense* Killip (type)
3962. *Sesbania exasperata* H.B.K.
3966. *Triplaris pyramidalis* Jacq.
3971. *Bunchosia rhombifolia* Turcz.
3979. *Machaerium attenuatum* Killip (type)
4080. *Dioclea guianensis* Benth.
4161. *Rhynchosia calycosa* Hemsl.
4242. *Chaetocalyx retusa* Blake (not *C. latisiliqua*)
4255. *Carex conferto-spicata* Boeckl. (Det. Mackenzie)
4373. *Clusia multiflora* H.B.K. (Det. A. C. Smith)

Rusby & Pennell, Colombia

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Rusby & Pennell, Colombia.

Malpighiaceae determined by C. V. Morton; others by E. P. Killip
unless otherwise noted.

U. S. National Museum, December 1934.

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1141. " *purpurea puberula* (Ndz.) Morton
1390. *Mandevilla subsagittata* (R. & P.) Woods. (Det. Woodson)
1403. *Vismia lauriformis* (Lam.) Choisy (Det. A. C. Smith)
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4373. *Clusia multiflora* H.B.K. (Det. A. C. Smitn)

(Det. Miss C. K. Allen, Missouri Botanical Garden).

Rusby & Pennell.

2434. *H⁴ brevicornis* (H. B. K.) Don

2438. *H. major* Wedd.

3001. *H. dasyantha* Gilg

4268. *H. foliosa* Gilg

Determination of current South American collections

Rusby & Pennell.

627. *Disterigma elassanthum* Blake. Type.
2411. *Loasa campanuliflora* Tr. & Planch.

MALPIGHIACEAE. DET. C. V. MORTON.

Rusby & Pennell 103. *Mascagnia violacea* (Tr. & Pl.) Ndz. (ex char.)

" " " 338. *Tetrapterys huilensis* Morton (type)

Pennell 1202. *H. suaveolens* Poit.
3585. *H. " "*
3891. *H. pectinata* (L.) Poit.

Heptkris
det. Miller

-Rusby & Pennell 4457 *Miconia desmantha* Benth.

Rusby & Pennell 4464 Unidentifiable, possibly *Leandra*
" " 817 " " "

Rubus Rusby & Pennell, and Pennell 1917
637. *R. glaucus* Benth.
708. *R. porphyromallus* Focke
884. Cf. *R. guayanensis* Focke
912. *R. guyanensis* (aff.) Focke
1843. *R. boliviensis* Focke
1969. *R. glaucus* Benth.
3129. *R. glaucus* Benth.
3326. *R. urticaefolius* Poir.

Rusby & Pennell & Pennell, 1917

586. *O. scandens* H.B.K.
764. *O. lotoides* H.B.K.
1593. *O. barrelieri* L.
2571. *O. pubescens* H.B.K.
2939. *O. lotoides* H.B.K.
3096. *O. tolimensis* R. Knuth, TYPE
3113. *O. scandens* H.B.K.
3312. *O. hedysaroides* H.B.K.

Rec'd. Jan. 1932

Dist. by J. C. Smith or L. S. otherwise note ⁴ ✓

Colombia:

Rusby & Pennell (or Pennell):

16. *Cissus erosa* L.C.Rich.
40. " " "
59. *Chelonanthus acutangulus* (R. & P.) Gilg
178. *Carearia mariquitensis* HBK. (comp. type at P.)
224. *Ficus elliptica* HBK. (comp. type at P.)
266. *Trichilia cuneata* Radlk. (det. Harms)
275. *Trichilia aff. peruviana* C.DC. (det. Harms)
280. *Aristolochia ringens* Vahl
288. *Gouania tomentosa* Jacq.
292. *Sissus sicyoides* L.
299. " "
323. *Phthirusa theobromae* (Willd.) Eichl.
326. *Waltheria americana* L.
371. *Ficus elliptica* HBK.
440. *Chelonanthus acutangulus* (R. & P.) Gilg.
445. *Melochia mollis* (HBK.) Tr. & Pl. (comp. type at P.)
542. *Gaultheria erecta* Vent.
564. *Gaultheria anastomosans* HBK.
655. *Smilax Ruiziana* Kunth
672. *Styrax macrocalyx* Perk.
678. *Symbolanthus latifolius* Gilg
720. *Siparuna macrophylla* (HBK.) A.DC.
748. *Vaccinium caracasanum* HBK.
749. " "
753. *Rhamnus Goudotianus* Tr. & Pl.
802. *Hedyosmum Goudotiamum* Solms, not H. scabrum
806. *Nectandra globosa* (Aubl.) Mez
821. *Smilax cumanensis* H. & B.
828. *Gaultheria anastomosans* HBK.
840. *Vaccinium caracasanum* HBK.
841. " "
885. *Cissus rhombifolia* Vahl
922. *Siparuna macrophylla* (HBK.) A.DC. (comp. type at P.)
961. *Clethra repanda* Turcz.
967. *Gaultheria anastomosans* HBK.
984. *Sisyrinchium iridifolium* HBK. (comp. type at P.)
996. *Gaultheria erecta* Vent. (comp. type at B.)
1068. *Burmannia capitata* (Michx.) Mart.
1149. *Bursera tomentosa* (Jacq.) Tr. & Pl.
1258. *Gaylussacia buxifolia* HBK.
1304. *Orthosanthus chimboraensis* (HBK.) Baker
1311. *Pernettya myrsinoides* (HBK.) Zucc.
1312. " "
1313. *Gaultheria cordifolia* HBK.
1314. *Gaultheria anastomosans* HBK.
1315. " "
1316. " "
- 1316A. " "
1324. *Sisyrinchium convolutum* Nocea
- 1348A. *Sisyrinchium alatum* Hook.
1383. *Cissampelos pareira* L. v *typica* Diels
1416. *Burmannia flava* Mart.
1418. *Chelonanthus bifidus* (HBK.) Gilg (comp. type at B.)

Rusby & Pennell (cont.):

1546. *Chelonanthus bifidus* (HBK.) Gilg
1656. *Disciphania appendiculata* Diels (comp. type coll. at K.)
1684. *Chelonanthus uliginosus* (Griseb.) Gilg
1726. *Cipura paludosa* Aubl.
1745. *Cleome pilosa* Benth.
1866. *Cissampelos fasciculata* Benth.
1885. *Boussingaultia brachystachys* (Moq.) (comp. type at K.)
1935. *Gaultheria cordifolia* HBK.
2023. *Clethra fimbriata* HBK. (comp. type at P.)
2025. *Gaylussacia buxifolia* HBK. (comp. type at P.)
2030. *Sisyrinchium bogotense* HBK.
2046. *Ternstroemia meridionalis* Mutis
- 2059, part. *Pernettya myrsinoides* (HBK.) Zucc.
2061. *Gaultheria anastomosans* HBK. (comp. type at P.)
2062. " "
2082. *Sisyrinchium pusillum* HBK.
2091. *Gaultheria purpurascens* HBK.
2113. *Sisyrinchium pusillum* HBK. (comp. type at P.)
2162. *Sisyrinchium bogotense* HBK. (comp. type at P.)
2185. *Macrocarpaea polyantha* Gilg (comp. type coll. at K.)
2208. *Ternstroemia meridionalis* Mutis
2218. *Gaultheria purpurascens* HBK. (comp. type at P.)
2372. *Gaultheria anastomosans* HBK.
2431. *Dendrophthora squamigera* (Benth.) B. & H. (comp. type at K.)
2432. *Sisyrinchium bogotense* HBK.
2453. *Dendrophthora clavata* (Benth.) Urb. (comp. type at K.)
2487. *Disterigma elaterrroides* (HBK.) Nied.
2490. *Symbolanthus tricolor* Gilg
2598. *Vaccinium polystachyum* Benth.
2742. *Buettneria mollis* HBK.
- 2782A. " "
2782. *Cipura paludosa* Aubl.
2794. " "
2853. *Chelonanthus bifidus* (HBK.) Gilg
2861. *Chelonanthus uliginosus* (Griseb.) Gilg
2924. *Cipura paludosa* Aubl.
2937. *Vaccinium polystachyum* Benth.
2946. *Sisyrinchium convolutum* Nocca
2955. *Vaccinium polystachyum* Benth.
2983. *Pernettya myrsinoides* (HBK.) Zucc. (comp. type at P.)
3009. *Disterigma empetrifolium* (HBK.) Nied.
3138. *Gaultheria cordifolia* HBK. (comp. type at B.)
3140. *Pernettya Pentlandii* DC. (comp. type at C.)
3146. *Siparuna buddleifolia* (Benth.) A.DC. (comp. type at K.)
3202. *Hedyosmum Bonplandianum* HBK. (comp. type at P.), not
H. Goudotianum
3324. *Cissampelos fasciculata* Benth.
3395. *Cleome puberula* Tr. & Pl. (comp. type coll. at K.)
3474. *Waltheria americana* L.
3495. *Curtia tenuifolia* (Aubl.) Knobl
3546. *Erythraea quitensis* HBK. (comp. type at P.)
3622. *Cipura paludosa* Aubl.
3623. *Aristolochia pilosa* HBK. (comp. type at P.) (!O.C.Schmidt)
3630. *Nectandra caucana* Mez (comp. type at K.)
3631. *Xylosma elegans* (Tul.) Tr. & Pl. (comp. type at P.)

Rusby & Pennell (cont.):

3635. *Cecropia Goudotiana* Trec. (comp. type at P.)
 3641. *Cipura paludosa* Aubl.
 3671. " "
 3722. *Souroubea guianensis* Aubl.
 3781. *Ficus glabrata* HBK.
 3830. *Triplaris caracasana* Cham.
 3832. *Herrania albiflora* Goud.
 3915. *Casearia spinosa* Willd.
 3942. *Bombax momplexense* HBK. (comp. type at P.)
 3965. *Triplaris Cumingiana* Fisch. & Mey.
 3976. *Lafoensia punicifolia* DC.
 4090. *Lecythis elliptica* HBK.
 4116. *Helicteres guazumaeifolia* HBK.
 4123. *Struthanthus orbicularis* (HBK.) Blume
 4142. " "
 4208. *Herrania albiflora* Goud.
 4250. *Pernettya myrsinoides* (HBK.) Zucc.
 4253. *Sisyrinchium pusillum* HBK.
 4262. *Vaccinium densiflorum* Benth.
 4267. *Disterigma empetrifolium* (HBK.) Nied.
 4280. *Gaylussacia buxifolia* HBK.
 4306. *Gaultheria cordifolia* HBK.
 4354. *Cavendishia sophoclesioides* A.C.Smith (type)
 4371. *Ternstroemia meridionalis* Mutis (comp. type at P.)
 4431. *Disterigma cuspidatum* (Planch.) Nied.
 4548. *Gustavia pleurocarpa* Pittier (comp. type coll.) (new to S.A.)
 4575. *Clusia Cooperi* Standl. (comp. type coll.) (new to S.A.)
 4576. " " "
 4585. *Aristolochia pilosa* HBK. (!O.C.Schmidt)
 4593. *Ficus glabrata* HBK. (comp. type at P.)
 4703. *Struthanthus orbicularis* (HBK.) Blume (comp. type at P.)
 4747. *Aristolochia loriflora* Masters (det. O.C.Schmidt)

4437. *Miconia desmantha* Benth. (det. Gleason)

Colombia.

Rusby & Pennell:

377. *Phthirusa tortuosa* A.C.Smith (type)
 583. *Siparuna huilensis* A.C.Smith
 837. *Phthirusa pyrifolia* (HBK.) Eichl?
 869. *Siparuna huilensis* A.C.Smith (type)
 870. " " "
 1662. *Aegiphila integrifolia* (Jacq.) Jacks. (det. Moldenke)
 2060. *Vaccinium floribundum* HBK.
 2664. *Themistoclesia rostrata* A.C.Smith (type)
 3199. *Struthanthus leptostachyus* (HBK.) G. Don. vel valde aff.
 3519. *Callicarpa acuminata* HBK. (det. Moldenke)
 3629. " " "
 3902. *Psittacanthus Warmingii* Eichl.
 4288. *Vaccinium Pennellii* A.C.Smith
 4316. " " "
 4341. *Gaultheria Pennellii* A.C.Smith (type)
 4354. *Cavendishia sophoclesioides* A.C.Smith (type)

MISCELLANEOUS

- Gleason 785. *Ficus gleasonii* Standl.
 841. " *olmediaefolia* Standl.
 De la Cruz 1167. *Trema micrantha* (L.) Blume
 1558. *Ficus gleasonii* Standl. }
 2359. " " "
 2396. " " "
 2639. " " "
 2870. " " "
 4496. *Solanum surinamense* Steud
 Broadway (Venezuela) 736. *Coleosanthus diffusus* (Vahl) Ktze. (Det. Blake)
 Broadway 848. *Parahancornia amapa* (Hub.) Ducke
 Pachano 47. *Hydrocotyle bonplandii* Rich.
 81. *Geranium mexicanum* H.B.K.
 94. *Tagetes crassiceps* Blake (Det. Blake)
 105. *Minthostachys mollis* (H.B.K.) Epl. (Det. Epling)
 189. *Neonelsonia acuminata* (Benth.) C. & R.

Pennell (Colombia)

2262. *Ribes andivola* Janez. (Compared with type at Geneva)
 2431. *Dendrophthora squamigera* Benth. (Compared with type at Kew)
 3446. *Vismia dealbata* H.B.K. (Compared with type at Paris)

Rusby (Bolivia)

- Oxalis* {
 746. *O. pseudo-violacea* R. Knuth, TYPE
 755. *O. medicaginea* H.B.K.
 758. *O. buchtienii* (Rusby) R. Knuth

Rusby (Bolivia)

- Bolivia* -
 468. *R. boliviensis* Focke (rather than *R. sellowii*)
 474. Aff. *R. guayanensis* Focke (not *R. bogotensis*)
 476. *R. buchtienii* Focke

- Rusby & Pennell 778 sp.nov. unnamed. Distr. as *Centropagon* sp. ✓
Burmeistera , 997 sp.nov. unnamed. Distr. as *Siphocampylus* sp.

Rusby (Bolivia)

960. *Nephromeria axillaris acutifoliola* (Kuntze) Schindl.
 961. *Desmodium affine* Schlecht.
 964. *Meibomia limensis* (Hook.) Kuntze
 976. " *scorpiurus* (Sw.) Kuntze

Rusby 637 *sparsipilus* Wim. Distr. as (?) *dubius* Zahlbr. *Siphocampylus*

Rusby & Pennell 947 *venosus* Gl. var. *neivanus* Wim. *Siphocampylus*

Rusby

2040. *Weinmannia trollii* O. C. Schmidt

Reported by N.Y. Bot. Gard. June 1938.

Det. Suessenguth:

- Rusby & Pennell 97. *Iresine elatior* Rich.
 160. *Alternanthera halimifolia* Standley var.
 3827. *Chamissoa altissima* HBK.
 3858. *Alternanthera polygonoides* R. Br. sens. lat.
 4050. *Iresine elatior* Rich.

- Mulford Biol. Expl. 2057. *A. pteroneura* O.C. Schmidt
1162. *A. pilosa* H. B. K.
1776. " "
1857. " "
145. " *boliviensis* Kuntze
601. " "
502. " "
1164. " *odoratissima* L.

Aristolochia

Eupatorium and eupatorioid Compositae collected in Bolivia by the
Mulford Expedition. By N. H. Ruebly - 1921.

- Recd. at Gray Herb. about June 1st, 1922. Determined by B. L. Robinson.
- 68 *Ageratum conyzoides* L.
96 *Eupatorium scopulorum* Wedd.
105 *Ophryosporus piqueroides* (DC.) Benth. & Hook. f.
120 *Stevia*
153 *Ophryosporus Cumingii* (Sch.-Bip.) Benth. & Hook. f.
168 *Stevia*
185 *Eupatorium Sternbergianum* DC.
267 *Stevia*
304 *Vernonia*
376 *Eupatorium macrophyllum* L.
424 *Ophryosporus piqueroides* (DC.) Benth. & Hook. f.
626 *Mikania Haenkeana* DC.
677 *Ageratum conyzoides* L.
689 *Eupatorium laevigatum* Lam.
918 *Ageratum conyzoides* L.
919 *Ageratum conyzoides* L.
1317 *Eupatorium kleinioides* HBK.
1350 " *ivaefolium* L.
1353 *Mikania officinalis* Mart.
1426 *Eupatorium ivaefolium* L.
1485 " *hecathnthus* (DC.) Bak.
1685 " *ivaefolium* L.
1713 " *kleinioides* HBK. (n.d.)
1983 *Mikania psilostachya* DC.
2145 " *rubella* Lingelsheim.
2146 *Ageratum conyzoides* L.
2147 *Eupatorium morifolium* HBK. (n.d.)

Flora of Arizona

Interesting localities. Rusby's collection of 1883.

- 506 *Ranunculus cordiophyllus*, Hook, Harts Ranch
 513 *Arabis perfoliata*, Lam Prescott,
 514 *Streptanthus cordatus*, Nutt. Yampai.
 515 " *Graba asprella*, E. L. G. n. sp. Lynx Creek.
 516 " *Carolina*, var *micrantha*, Near Prescott.
 522 *Nisotzia refracta*, Eng. Holbrook.
 524 *Krameria parifolia*, Benth., banks of Col-
 orado at mouth of Diamond Creek.
 525 *Polygala Rusbyi*, E. L. G. n. sp. Banghart's
 Ranch, and Yampai.
 526 " *scoparia*, HBK. Oak Creek.
 528 *Silene acaulis*, L. summit of Mt. Humphreys
 530 } *Arenaria scabrella*, E. L. G. n. sp. "
 531 } "
 532 " *Rusbyi* " " throughout the
 juniper forests of Yavapai Co.
 537 *Sphaeralcea Endlicheri*, Gray Prescott.
 539 *Abutilon Parvulum*, Banghart Ranch
 540 *Linnia Tex.-Mexicana*, throughout
 San Francisco Forest.
 542 *Larrea Mex.*, More, a very small-leaved
 and very glandular form on
 bank of Colorado Riv. at mouth of
 Diamond Creek.
 543 *Geranium caespitosum*, James Flaggstaff
 545 *Oxalis decaphylla*^{HBK.} illc. Humphreys
 549 *Zizyphus obtusifolius*, Gray, Near Peach Springs
 553 *Lupinus concinnum* Agardh Lynx Creek.
 557 *Trifolium Kingii*, Wats. Bill Williams Mtn.
 561 *Hosackia Wrightii*, Gray, Flaggstaff.
 564. *Dalea Wrightii*, Gray Beaver Head
 567 *Robinia Neo-Mexicana*, Gray at Hell's canon

- a var with nearly white flowers and cordate leaflets.
- 5-68 *Astragalus Pattersonii*, Eng, Casino
- 5-72 " *Brandegei*, Baughart Ranch
- 5-73 " *Rushii*, E.L.G. n.sp. Mt. Agassiz.
- 5-75 " *Mitchamia*, Not one specimen at Williams
- ~~5-86 *Prossedeziana* (?) specimen sent
Lindner.~~
- 5-89 *Senn triplorum*, Bush very abundant on Bill Williams Mts.
- 5-90 " *Rossii*, Sevige, Mt. Humphreys
- 5-91 *Potentilla subviscosa*, E.L.G. Blagstoff.
- 5-96 *Ivesia depauperata*, Eng, Head of Oak Creek
- 5-99 *Ribes Rushii*, E.L.G. n.sp. San Francisco Mts.
+ Bill Williams Mts.
- 601 *Sedum rhodanthemum*, Eng Mt. Humphreys
- 602 *Lythrum alatum*, Bush var. *lineopalinum*
Eng, Peach Springs.
- 604 *Cenothera chamaenerioides*, Eng, Clifton
+ Lynx Creek
- 612 *Mertzelia Wrightii*, Eng Beaver Head,
- 613 " *m. sp.* multijuga, Near Prescott
- 614 " *n. sp.* Bellmont
- 617 *Mammillaria vivipara*, Haw.
formic sphacelantha Eng.
Blagstoff.
- 620 *Cerens straminens* Eng Beaver Head
- 621 *Opuntia Bigelowii* " Near Peach Springs
- 622 *Opuntia acanthocarpa* Eng & Bjj. Peach Springs & adjacent country.
- 633 " *Whipplei* Eng & Bjj. Navajo Springs & Prescott.
- 624 " *chlorotica* sparingly throughout southern part of Yavapai Co.
- (Not collected) *Opuntia basilaris*, Hackberry.
- 638 *Lonicera microserata*, Banks, Mt. Humphreys
- 640 *Galium Wrightii*, Eng, about Prescott.
- 642 " *microphyllum*, Baughart Ranch
- 643 *Valeriana dioica*, L, Bill Williams Mts.
- 647 *Hymenothrix Wislizenii*, Eng, Peach Springs.
- 650 *Tetradymia glabrata*, Casino
- 651 *Bigelovia Rushii*, E.L.G. n.sp. Holbrook
- 651½ " *spatulata*, Prescott.
- 653 *Helianthus Maximilianae*, Schrad. South of Blagstoff.
- 654 *Lygodesmia spinosa*, Blagstoff.
- 657 *Riddellia Tajetina*, Johnson's Canon.
- 658 *Taraxacum dens-leonis* Prescott.
- 659 *Dicoria Brandegei*, Holbrook
- 660 *Toussentia Arizonica*, Holbrook & Ash Fork
- 661 *Coccopsis Drummondii*, Oak Creek
- 663 *Malacothrix Rushii*, E.L.G. n.sp. Baug-
hart Ranch
- 665 *Senecio arvensis*, L, var *crispa*, Rush.,
Lynx Creek
- 669 " *esp. Arizonicus*, E.L.G. n.sp.
Lynx Creek

670 *Senecio Franciscanus*, E. L. G. in sp.

Flagstaff.

- 671 " *Actinella*, E. L. G. in sp. Flagstaff.
- 672 " *Neo-Mexicana*, Gray, Oak Creek
- 673 *Actinella Bigelovii*, Gray Flagstaff &c
- 674 " *scaposa* Nutt. Yampa
- 675 " *bimini* Oak Creek & Beaver Head
- 676 *Eucelia frutescens*, Hockberry
- 676½ " *Rushyzia*, E. L. G. in sp. Oak Creek
- 677 *Baechais Wrightii*, Gray Prescott
- 678 " *brachyphylla*, Yampa Co
- 680 *Transeria Hookeriana*, Near Casino.
- 681 *Lactuce pulchella* de. Mt Agassiz.
- 682 *Oxytaenia acerosa*, Halbrook
- 683 *Sol. multidiata*, var *scopularum* by Mt. Humphreys
- 684 " *mama*, Near Flagstaff.
- 685 *Aster Kanaceifolius*, Ash Fork
- 686 " *canescens*, Thoroughant
- 687 " *Paniciflorus*, Albuquerque var
- 688 " *Ericaefolius* Thoroughant
- 689 " *folicium*, var Burke, Hart's Ranch
- 690 " *spinosus*, Albuquerque, New
- 691 *Erijiun subdecurrens*, Mt Agassiz
- 691½ " *Flagellans*, Bill Williams river
- 692 *Hymenopappus lateris*, D. Francisco Forest
- 693 " *temifolius* .. .
- 694 *Perezia Wrightii*, common
- 697 *Gnaphalium strictum* Mt Agassiz
- 700 *Artemisia Bigelovii*, Gemison &c

- 702 *Dysocaria Cooperi*, Gray, Hackberry.
703 *Lepidium sativum* Albuquerque, NM
704 " *columnaris*, Santa Fe, "
705- *Balduina oppositifolia*, L & S, Albuquerque "
706 *Peltobuhnia Hespereia*, Cubero N. M.
707 *Circus undulatus*, Baugharts Ranch
708 " *Arizonaicus* Oak Creek
709 " *ochrocentrus*, Near Peach Springs
710 " *Drummondii*, ^{N.M.} Hart's Ranch
713 *Lobelia splendens*, Oak Creek
714 *Campanula Schenckiana*, Clarks Valley
718 *Mandevilla scoparia*, Peach Springs
722 *Acerates amiculata*, Prescott Co.
723 *Gentiana Thunbergii*, Flaggstaff.
724 *Erythraea calycosa*, var. *Arizonaica*
Peach Springs,
725- *Frasera paniculata*, Oak ~~and~~
728 *Gilia linearis*, very stout and
branching at Munn's Ranch
Gilia Rusbyi, throughout Forest region,
and like all the other *Gilia* is var-
iable as to length of corolla
tube. Petals very variable.
731 " *divaricata*, ~~and~~ Oak
733 " *rigida*, near var *acerosa*, Halbrook
733½ " *Humilis*, with a hard wood
perennial root. Halbrook
734 " *templaea*, Bent. Lynx Creek.
735- *Phlox longistylis* var. *bimaculata* Ash & Fish
736 " " " " Stansbury & V.C.

- 737 *Phlox speciosa*, var. *Woodshanic*
 Williams
 739 *Phacelia hispida*, north of Prescott
 740 " malle, E.L.S. n.sp " " "
 741 " *Rusbyi* " " "
 742 " *Tremontii*, Campai.
 743 " *Arizonaica* North of Prescott
 744 *Eriogonum angustipolium*, Oak Creek
 (I think this species is not distinct
 from *E. glutinosum*)
 745 *Eritrichium micranthum*, var. Prescott.
 746 *Echinospermum pinnatum*, E.L.S. Casimino.
 + *Mogollonense*, N.M.
 748 *Eritrichium setosissimum* Williams &
 Blagstaff.
 750 " *barbigerum*, Casimino.
 751 " (specimen sent - herewith)
 Ash Park.
 752 *Lithospermum cobrense*, E.L.S. Williams
 752½ *Convolvulus incanus*, Beaver Creek
 754 *Solanum Xanti*, Big, Oak Creek
 755 *Physalis pendletonii*, Big Casimino.
 759 *Castilleja minor* Oak Creek
 767 *Pedicularis Parryi*, Mt. Humphreys
 772 *Pentstemon Palmeri*, a dwarf form
 at Peach Springs.
 773 " *Rusbyi*, E.L.S. n.sp Banghart
 Rancho, and Campai.
 775 " *virgatus* Blagstaff.
- 780 *Verbenae polystachya*, near Blagstaff.
 781 *Aphyllon multiflorum* Casimino.
 786 *Hedemora procumbens*, E.L.S. n.sp Blagstaff.
 787 " *thyrsoides*, Oak Creek
 788 " " var *ablongipolia*
 Bonapai, Co.
 805 *Cladotrichia suffruticosa*, Colorado River
 806 *Eriogonum diflexum*, Hackberry
 807 "

divaricatum

, Denison
 808 " *coronulatum*, Casimino.
 809 " *Rusbyi*, E.L.S. n.sp near Casimino
 810 " *virginicum* Lynx Creek
 811 " *Palmeri*, Hackberry.
 812 " *ceratum* Blagstaff.
 813½ " *retundipolium*, Wujale, it. u.
 816 " *blavum* Casimino.
~~816~~ 817 " *inflatum* Peach Springs
 818 " *racemosum* Blagstaff.
 821 *Euphorbia dictyosperma* near Mt. Verde.
 822 " *strictosperma*
 823 " *Pendletonii* Everywhere
 824 " *setiloba*, Hackberry
 827 " *Zygophyllaceae* "
 831 *Pinus flexilis* 3 Mt. Humphreys.
 832 " *aristata* 3 Mt. Humphreys.
 833 *Agave Utahensis*, Peach Springs.
 836 *Smilacina sessilifolia*, Williams ult.
 842½ *gigantea* Spanningi, Rusby
 Base of Mt. Humphreys.

PLANTS OF NEW MEXICO AND ARIZONA.



The following is a partial list of my specimens. The Juncaceæ, Cyperaceæ and Gramineæ are still undetermined, and three boxes of other plants are yet to arrive. A supplement will be published later, giving the additional species, and naming those species marked doubtful in this list, which has been hastily prepared.

The price of specimens is \$8 per hundred, no selection being allowed beyond the selection of entire Orders. When any further selection is made, \$10 per hundred will be charged. When the full set is taken only \$5 per hundred will be charged. H. H. RUSSELL, Franklin, N. J.

- | | |
|---|---|
| 1 Clematis ligusticifolia, Nutt. (Fruit.) | 50 Malvastrum leptophyllum, Gray. |
| 2 " Bigelowii, Torr. | 51 " hastatum, Gray. |
| 3 Thalictrum Fendleri, Eng. | 52 Anoda hastata, Cav. |
| 4 Anemone decapetala, L. | 53 Linum Neo-Mexicanum, E. L. Greene. |
| 5 Delphinium azureum, Mx.? | 54 " aristatum, Engelm. |
| 6 Aeonium Fischeri, Reich. | 55 " n. sp.? |
| 7 Argemone hispida, Gray? | 56 Tribulus grandiflorus, B. & H. |
| * 8 Eschscholtzia Californica, Cham., var. | 57 " maximus, L. |
| 9 Corydalis aurea, Willd., var. occidentalis, Gray. | 58 Geranium Fremonti, Torr. |
| 10 Arabis Holboellii, Hornem. | 59 " Richardsoni, Fisch. & Mey. |
| 11 " " var. patula. | 60 Ptelea angustifolia, Benth. |
| 12 Dryopteris runcinatum, Gray. | * 61 Pachystima Myrsinoides, Raf. |
| 13 Streptanthus carinatus, Wright. | * 62 Rhamnus spp. <i>Californicus</i> , var. <i>lanceolatus</i> |
| 14 Vesicaria Gordoni, Gray. | 63 " |
| 15 " purpurea, Gray. | 64 Ceanothus Fendleri, Gray. |
| 16 " stenophylla, Gray. | 65 " Greggii, Gray. |
| 17 Draba cuneifolia, Nutt. | 66 Vitis Arizonica, Engelm. |
| 18 " streptocarpa, Gray. | 67 Sapindus marginatus, Willd. |
| 19 Sisymbrium diffusum, Gray. | 68 Negundo aceroides, Moench. |
| 20 " canescens, Nutt. | * 69 Acer grandidentatum, Nutt. (Fruit.) |
| 21 " sp. | * 70 Rhus microphylla, Gray. (Fruit.) |
| 22 " | * 71 " trilobata, Nutt., var.? <i>aromatica</i> var. <i>trilobata</i> |
| 23 Erysimum asperum, DC. | 72 " |
| 24 Thelypodium integrifolium, Endl. | 73 Crotalaria lupulina, Raf. |
| 25 " linearifolium, Watson. | 74 Lupinus argenteus, Pursh. |
| 26 " Wrightii, Gray. | 75 " pusillus, Pursh? |
| 27 Lepidium intermedium, Gray. (Petaled form.) | 76 " Sitgreavesii, Watson. |
| * 28 Thlaspi alpestre, L., var. <i>purpurea</i> . | * 77 Hosackia Wrightii, Gray? (<i>or non sp.</i>) <i>viridis</i> |
| 29 Polanisia uniglandulosa, DC. | 78 Psoralea floribunda, Nutt. |
| 30 Viola Canadensis, L. | * 79 Dalea albiflora, Gray? (May be new.) |
| 31 Polygala puberula, Gray. | 80 " alopecroides, Willd. |
| 32 Monnieria Wrightii, Gray. | 81 " formosa, Torr. |
| 33 Krameria secundiflora, DC. | 82 " filiformis, Gray. |
| 34 Silene Greggii, Gray. | 83 " Jamesii, T. & G. |
| 35 Lychnis Drummondii, Watson. | 84 " polygonoides, Gray. |
| 36 Cerastium nutans, Raf., var. | 85 " Wislizeni, Gray. |
| 37 Stellaria Jamesii, Torr. | 86 Petalostemon exilis, Gray. |
| 38 Arenaria saxosa, Gray. | 87 " tenuifolius, Gray. |
| 39 " " var.? | 88 Robinia Neo-Mexicana, Gray. |
| 40 Drymaria sperguloides, Gray. | * 89 " (With hispid fruit.) |
| 41 " tenella, Gray. | * 90 Astragalus Arizonicus, Gray. <i>non sp. oxy</i> |
| * 42 " <i>glandulosa</i> | 91 " Cobrensis, Gray. |
| 43 Talinum aurantiacum, Engelm. | 92 " Missouriensis, Nutt. |
| 44 " coulteriflorum, E. L. Greene. | 93 " Nuttallianus, DC. |
| * 45 Claytonia perfoliata, Donn. | 94 " triflorus, Gray. |
| 46 Sidalcea malvaeflora, Gray. | 95 Glycyrrhiza lepidota, Pursh. |
| * 47 " n. sp.? | 96 Desmodium Neo-Mexicanum, Gray. |
| 48 Malvastrum coecineum, Gray, var. | 97 " sp.? <i>luteum</i> , <i>luteum</i> |
| 49 " | 98 Viechia exigua, Nutt. |
| | 99 " leucophaea, E. L. Greene. |
| | 100 " pulchella, HBK. |

H. H. RUSSELL
Franklin, N. J.
March 1871

- 2
- 101 *Vicia Americana*, Muhl.
 * 102 " " var. *linearis*, Watson.
 103 *Lathyrus paluster*, L., var.
 104 " " "
 105 *Cologania longifolia*, Gray.
 106 *Phaseolus macropoides*, Gray.
 107 " *retusus*, Benth.
 108 " *Wrightii*, Gray.
 109 *Sophora sericea*, Nutt.
 110 *Hoffmannseggia Jamesii*, T. & G.
 111 " *stricta*, Benth.
 112 *Cassia bauhinioidea*, Gray.
 113 *Prosopis juliflora*, DC. (Fruit.)
 * 113a *Mimosa dysocarpa*, Benth.
 114 " *pubescens*, Benth.
 115 *Acacia constricta*, Benth.
 116 " *filicina*, Willd.
 117 " sp.?
 * 118 *Calliandra conferta*, Benth.
 119 *Prunus Andersoni*, Gray.
 120 *Spiraea discolor*, Pursh.
 121 " " var. *ariaefolia*, Watson.
 122 *Rubus Neo-Mexicanus*, Gray. *edelius*
 123 " *strigosus*, Mx.
 124 " *trivialis*, Mx.
 125 *Cercocarpus parvifolius*, Nutt.
 126 *Cowania Mexicana*, D. Don.
 127 *Fallugia paradoxo*, Endl.
 128 *Potentilla Thunbergi*, Gray.
 * 129 *Amelanchier alnifolia*, Nutt. *iosa californica*, var.
 130 *Fendlera rupicola*, Engelm.
 131 *Ribes pinetorum*, E. L. Greene. (Lvs.)
 132 *Sedum Wrightii*, Gray.
 133 *Oenothera Hartwegi*, Benth.
 134 " " var. *lavandulæfolia*,
 135 " *pinnatifida*, Nutt. [Watson.]
 136 " *trichocalyx*, Nutt.
 137 *Gaura suffulta*, Engelm.
 138 *Mentzelia albicans*, Dougl.
 * 139 " *aspera*, L.
 140 " *Wrightii*, Gray.
 141 *Megarrhiza Gilensis*, E. L. Greene.
 142 *Sicyos*
 142a *Echinocactus Wislizeni*, Engelm.
 143 *Cereus Fendleri*, Engelm. (No fruit.)
 144 " *phoeniceus*, Engelm. (No fruit.)
 145 *Opuntia arborescens*, Engelm.
 146 " sp.? (Fruit.)
 147 *Cymopterus montanus*, T. & G., var. *purpureascens*, Gray.
 * 147a *Ligusticum scopolorum*, Gray, apparently.
 148 *Peucedanum nudicaule*, Watson.
 149 *Lonicera dumosa*, Gray.
 150 *Symporicarpus oreophilus*, Gray.
 151 *Mitracarpus breviflorum*, Gray.
 152 *Houstonia* n. sp.
 153 " sp.?
 154 *Gallium Fendleri*?
 155 " n. sp.?
 156 *Valeriana edulis*, Nutt.
 * 157 *Stevia serrata*, Cav.
 158 *Carpiocheta Bigelowii*, Gray.
 159 *Baccharis cœruleascens*, Gray.
 * 160 " *ptarmiacæfolia*, DC., var.
 * 161 *Aciphena acerosa*.
 162 *Partenium incanum*, HBK.
 163 *Zingia grandiflora*, Nutt.
 164 *Sanvitalia Aberti*, Gray.
 165 *Baileya multiradiata*, Harv. & Gray.
- J
- 166 *Baileya pleniradiata*, Gray.
 167 *Chrysopsis villosa*, Nutt., var.
 168 "
 169 *Galinsoga parviflora*, Cav.
 170 *Viguiera cordifolia*, Gray.
 * 171 *Verbesina encelioides*, Benth. & Hook.
 172 *Gymnolomia multiflora*, Benth. & Hook.
 173 *Riddellia tagetina*, Nutt.
 174 *Troximon aurantiacum*, Hook.
 175 *Malacothrix Fendleri*, Gray.
 * 176 *Helenium Hoopesii*, Gray, var.?
 * 177 *Hieracium* n. sp.
 178 " sp.?
 179 *Hymenopappus flavescens*, Gray.
 180 " sp.?
 181 *Perezia pura*, Gray.
 182 " *Wrightii*, Gray.
 183 *Layia glandulosa*, Hook. & Arn.
 184 *Carnuntia tenuiflora*, DC.
 185 *Pectis bilipes*, Gray.
 186 " *angustifolia*, Torr.
 187 *Gaillardia pulchella*, Foug.
 188 " *pinnatifida*, Torr.
 189 *Gnaphalium strictum*, Gray.
 190 *Melanipodium cinereum*, DC.
 191 *Aster adscendens*, Lindl.
 192 " *tanacetifolius*, HBK.
 193 " *multitlorus*, Ait.
 194 " *canescens*, Pursh.
 195 *Erigeron macranthus*, Nutt.
 196 " *glaebellus*, Nutt.
 197 " n. sp.?
 198 " *divergens*, T. & G.
 199 " *delphinifolius*, Willd.
 200 " *flagellaris*, Gray.
 201 *Bigelowia Douglasii*, Gray.
 202 " *graveolens*, Gray.
 203 *Trixis corymbosus*.
 204 *Gutierrezia eriocarpa*, Gray?
 * 205 " *Euthamiae*, T. & G.
 206 *Grindelia* n. sp.
 207 *Babia absinthiifolia*, Benth.
 208 *Hymenothecium polychaetum*, Gray.
 209 " *pentachaetum*, DC.
 210 *Aphantostephus Arizonicus*, Gray.
 211 *Palafoxia Hookeriana*, T. & G.
 212 *Seneio aureus*, L., var.
 213 " "
 214 " *longilobus*, Benth.
 215 " *Rusbyi*, E. L. Greene.
 216 " n. sp.?
 217 *Aplopappus Parryi*, Gray.
 218 " *laricifolius*, Gray.
 219 " *spinulosus*, DC.
 220 *Cosmos bipinnatus*, Cav., var. *parviflorus*, Gray.
 221 *Stephanomeria minor*, Nutt.
 222 " *Thunbergi*, Gray.
 223 *Hymenothrix Wrightii*, Gray.
 224 *Chicus Neo-Mexicanus*, Gray.
 225 " *Parryi*, Gray.
 226 " *undulatus*, Gray.
 227 *Solidago Missouriensis*, Nutt.
 * 228 " *Bigelowii*?
 229 *Villanova chrysanthemoides*, Gray.
 230 *Ambrosia psilostachya*, DC.
 231 *Artemisia Ludoviciana*, Nutt., var.
 232 " " var. *[Mexicana]*, Gray.
 233 " " "
- 3
- 234 *Artemisia franserioides*, E. L. Greene.
 235 *Kuhnia eupatorioides*, L.
 236 *Brickellia oligantha*, Gray.
 237 " *grandiflora*, Nutt.
 238 " *Wrightii*, Gray.
 239 " *floribunda*, Gray.
 240 " sp.?
 241 " sp.?
 242 *Eupatorium Berlandieri*, DC.
 243 *Berlandiera lyrata*, Benth. *nuttiana*, var.
 * 244 *Pyrrhopappus Rothrockii*, Gray, var.
 * 245 *Heterospermum tagetinum*, Gray.
 246 *Actinella Richardsonii*, Nutt.
 247 " *odorata*, Gray.
 248 *Encelia frutescens*, Gray.
 249 *Thelesperma gracilis*, Gray.
 250 *Campanula rotundifolia*, L., var.
 251 *Arctostaphylos pungens*, HBK.
 252 *Primul Rusbyi*, E. L. Greene.
 253 *Forestiera Neo-Mexicana*, Gray.
 254 *Fraxinus pistiefolia*, Torr.
 255 *Menodora sebacea*, Gray.
 256 *Anisonia Palmeri*, Gray.
 257 " var. *molle*.
 258 *Asclepias involucrata*, Engelm.
 259 " *longicornis*, Benth.
 260 " *brachystephana*, Engelm.
 261 *Philibertia cyananthoides*, Gray.
 262 *Gentiana Amarella*, L., var.
 263 " *Rusbyi*, E. L. Greene.
 * 264 *Halenia Rothrockii*, Gray.
 265 *Collomia aggregata*, T. C. Porter.
 266 " *longiflora*, Gr. (Sp. very poor)
 267 " *Thunbergi*, Gray.
 268 *Gilia aurea*, Nutt.
 269 " *floccosa*, Gray.
 270 " *inconspicua*, Dongl.
 271 " var. *parviflora*.
 272 " *Nuttallii*, Gray, var.?
 273 *Eriodictyon glutinosum*, Benth.
 274 *Nama dichotomum*, Ruiz & Pav., var. *angustifolium*, Gray.
 275 *Phaeelia circinata*, Jacq.
 276 " *crenulata*, Torr.
 277 " *integrifolia*, Torr.
 278 " *mierantha*, Torr.
 279 " E. L. Greene.
 280 *Coldenia hispidissima*, Gray.
 281 *Echinospermum Redowskii*, Lehmann., var. *cupulatum*, Gray.
 282 " *ursinum*, E. L. Greene.
 283 *Eritrichium Jamesii*, Torr.
 284 " *leiocarpum*, Watson.
 285 " *pterocaryum*, Torr.
 286 *Heliotropium convolvulaceum*, Gray.
 287 " *Curassavicum*, L.
 288 *Lithospermum angustifolium*, Mx.
 289 " *multiflorum*, Torr.
 290 " *Cobreense*, E. L. Greene.
 291 *Mertensia paniculata*, Don.
 292 *Onosmodium Thurberi*, Gray.
 293 *Convolvulus incanus*, Vahl.
 294 *Cuscuta squamata*, Engelm.
 * 295 " sp.?
 296 *Evolvulus argenteus*, Pursh.
 297 " *Aztecicus*, Gray.
 298 " *sericeus*, Swz.
 299 *Ipomea costellata*, Torr.
 300 " *Mexicana*, Gray.

There are 5 parts to this.

464

- † 363d *Eriogonum polycladon*, Benth.
 364 *Eurotia lanata*, Moq.
 364a *Spirostachys occidentalis*, Watson.
 ✕ 365 *Teloxys cornuta*, Torr.
 366 *Gomphrena caespitosa*, Torr.
 ✕ 367 *Urtica gracilenta*, E. L. Greene. *U. Braun*
 368 *Celtis reticulata*, Torr. or *fruticosa*?
 369 *Morus parvifolia*.
 370 *Platanus* sp.? (Fruit.)
 371 *Salix longifolia*, Muhl.
 372 " *lasiolepis*, Benth.
 273 *Populus Fremonti*, var.(?)*Wislizeni*,
 374 *Tragia* sp. [Watson].
 375 *Croton corymbulosus*, Engelm.
 376 " *Texensis*, Mull.
 377 *Acalypha Lindheimeri*, Mull.
 378 *Euphorbia bilobata*, Engelm.
 379 " *exstipulata*, Engelm.
 380 " *alboarginata*, T. & G.
 381 " *eampestrata*, Cham. & Sehl.
 382 " " var.?
 383 *Alnus oblongifolia*, Torr.
 384 *Quercus undulata*, Torr.
 385 " *hypoleuca*, Engelm. (No fruit.)
 386 " *grisea*, Liebm.
 387 " *Emoryi*, Torr. (Lvs.)
 388 " *pungens*, Liebm.
 389 *Phoradendron flavescens*, Nutt., var.
 390 " *juniperinum*, Engelm.
 391 *Arcuothobium robustum*, Eng. (Lvs.)
 392 *Comandra pallida*, A. DC. (Fruit.)
 393 *Pinus strobiiformis*. (Fruit.)
 394 *Picea Sitchensis*, Carr. (Fruit.)
 395 *Pseudotsuga Douglasii*, Carr. (Fruit.)
 396 " " var.? (Fruit.)
 397 *Cupressus Arizonicus*, E. L. Greene.
 398 *Ephedra antisyphilitica*, C. A. Meyer.
- 399 *Ilabenaria sparsiflora*, Watson.
 400 *Epipactis gigantea*, Dougl.
 401 *Iris Missouriensis*, Nutt. (Fruit.)
 402 *Sisyrinchium Arizonicum*, Rothr. (Fr.)
 403 *Hesperantha Torreyi*, Watson.
 404 *Allium cernuum*, Roth.
 405 " *Bigelovii*, Watson.
 406 *Zygadenus porrifolius*, E. L. Greene.
 407 *Brodiaea pauciflora*, Gray.
 408 *Calochortus Gunnisonii*, Watson.
 409 *Yucca baccata*, Torr.
 410 " *angustifolia*, Pursh.
 411 *Agave Parryi*, Engelm. (Only fls.)
 412 *Nolina erumpens*, Watson.
 413 *Dasyllirion Wheeleri*, Watson.
 414 *Tradescantia tuberosa*, E. L. Greene.
 415 *Commelyna linearis*, Benth.
 416 *Equisetum laevigatum*, A. Braun.
-
- A *Gymnogramme hispida*, Mett.
 B *Notholaena sinuata*, Kaulf.
 C " *Hookeri*, D. C. Eaton.
 D " *dealbata*, Kunze.
 E " *Grayi*, Davenport.
 F *Cheilanthes Wrightii*, Hook.
 G " *lanuginosa*, Nutt.
 H " *Eatoni*, Baker.
 I " *Fendleri*, Hook.
 J " *Lindheimeri*, Hook.
 K *Pellaea atropurpurea*, Link.
 L " *Wrightiana*, Hook.
 M " " (the *P. mucronata* form.)
 N " *androuiedaeifolia*, Fee, var. *pubescens*, Baker.
 O *Woodsia Mexicana*, Fee, var.
 P " " "
 Q *Cystopteris fragilis*, Bernh.

Benne or Beni seed. *Sesamum Indicum* order Pedaliaceae. ~
Castor-oil bean. *Ricinus Communis*. A native of India.
Camphor tree. *Cinnamomum camphora* " " ? Order Lauraceae
Lognat. *Photinia (Eryobotrya) Japonica*. China + Japan.
Phoenix sylvestris found throughout India (the wild date-palm) is probably the tree
from wh. the date-palm (*P. dactylifera*) was originally derived.
Paddlewood, a tree of Guiana, *Aspidosperma excelsum* of the Apocynaceae.
also called wheel-tree from the form of a section of the trunk.

Sea-bean - Leguminous climbing plant, *Ertada scandens*, growing
in the tropics of both hemispheres, and remarkable for the size of its
seeds. Beans two inches across and half an inch thick.

Benne Seed,
(*Sesamum orientale*)
of the West Indies
St. Helena,
So. Carolina

Hannah Ruth
Alga
Annie
Kamala
~~Lynne~~
Mr. Dorville

5-2

Tragopogon microcephalus
(white forget-me-not)

[Native]

61 - *Erechtites* p. 269.

Cream-colored flowers.

81 - *Pyrrhopappus* p. 280.

Yellow flowers - (Stiff seeds.)

83. *Lactuca*

New Boston, N.H.

Machaeris patula
Newport Coal ^{Diron}
Pedou monilifera
Bulla Gouldiana
(formerly *Nobilosa*)
" —

- 1 *Magnolia* ⁽¹⁰³⁾
grandiflora
2 *Cordia tachyna - Jobi*
(*"Job's Tears"*) ⁽²⁰⁾
3 *Cinnamomum*
comphora
(*Comphor Tree*) ⁽¹⁰⁴⁾
4 *Eriobotrya Japonica*
(Loquat or Japanese
Plum) ⁽¹⁰⁵⁾
5-7 Fan Palm ^{var.} ⁽¹⁰⁶⁾
8 Date Palm ^{var.} ⁽¹⁰⁷⁾
" —

I do not know the palms
and there are a great
many here, cultivated as
shade trees. I have arrayed
the dead machaeras - I put
it in to show the size they
attain. never get them alive. I
since the top write this letter.

1. ⁴⁰² *Chlorogalum pomeridianum* Benth
2. *Calochortus splendens*. Dougl
"Mariposa Lily"
3. Onion Lily (Greenhouse)
4. ³⁹⁹ *Schindleria Elliottii* (Greenhouse)
5. *Brodiaea capitata* Benth
6. ³⁹⁴ *Bromelia aurea* Will.
"Golden Star"
7. *Asparagus Sprengelii* (Greenhouse)
8. " *plumosus* "
9. *Yucca whipplei* Zorn (native)
10. ⁴⁰¹ " *Alvolia* (Garden)
11. ³⁹⁸ *Gladilus Lemonii*
12. *Amaryllis Johnsonii* } Gordon
13. ⁴⁰⁰ *Lilium candidum* }
14. *Tritillaria biflora* Lindl (native)
"397 "Chocolate Lily"
15. *Asparagus medeoloides* (Garden)
Smilax
16. ³⁹⁶ *Wockera hyacintha* Garden &
Native
17. A Daisy that grows in my neighbor's
garden and I call "Lychnis daisy"
till I get a better name. The white
rays are long and the centre is blue

the foliage only - not very attractive
in this land of beautiful plants.

- 18^{4³⁹⁰} *Atriplex* *Californica* Aven. Beach
19^{4³⁹¹} " *fractiosa* " ?
20³⁹³ *Convolvulus* *occidentalis* (native)
21 *Plagiobothrys* *canescens* Benth.
892 One of our many wild white
forget-me-nots
22³⁹¹ *Stephanomeria* *virgata* Benth.
(Compositae)
23³⁹⁵ *Rosa* *californica* Cham
24 *Romneya* *Coulterii*. (Native)
White Poppy
25 *SIpomoea* *hederacea* (Gordon)
"Morningglories"
26 *Eucelia* *Californica* (Native)
(Composite)
27³⁹⁰ *Streptanthus* *polygaloides* Gr
(Cruciferace)

- 1 Cultivated Daisy. white and blue. Note the deads plumed at both ends. Did you ever see that in a weed before?
- 2 Negundo californicus J & G.
Bot Cedar
- 3 Mesquit Bean. From Imperia Co.
None no way of analysis if it but shall send for some part of its jet.
- 4 Quercus agrifolia Nee. "Live Oak". (This may or may not be Live Oak). Contains Oil - Burnt.
- 5 Cirsium lanceolatum L.
Bull Thistle.
- 6 Xanthium spinosum L.
- 7 Cedars of Goa. (Strat tree)
- 8 Foeniculum vulgare
- 9 Sonchus asper
- 10 Echinodorus natalensis Engelm
water Plantain
- 11 Convolvulus occidentalis Gr
- 12 Crepis viridis
- 13 Rhus ovalis. (Lemonade Berry)
- 14 Styphnolobium californicum Joss.
- 15 Zizina sp? (Garden - spotted species)
- 16 Diospyros kaki Lam.
Japanese Persimmon.
- 17 Manzanita sempervirens
Garden
- 18 Cornus Nutallii And.
Dogwood.

March 22. 1907

1. ²⁹³ *Anagallis arvensis* Linn
Orange. (Impenue)
2. ²⁹⁴ *Eschscholtzia California* Cham
Orange.
3. *Scirpus robustus* Pursh.
- 295 *Alico* Com. (Salt-marsh Bulrush)
- 296 ²⁹⁷ *Chrysopsis arganoides* var *rudis*. Gray
Acacia decurrens. Street & Gr. (Black Acacia)
- 298 ²⁹⁹ *Polygonum lapathifolium* L.
Commun Knobweed or Smartweed.
- 300 ³⁰¹ *Datisca glomerata* B & H. Datiscaceae
(*Solidago Guadalupensis* Gray.)
- 302 ³⁰³ *Curtia perennis*. Gr
(Gourd - Mock Orange)
10. *Salix lasiolepis* G.
- 304 ³⁰⁵ (*Arroya Willow*)
- (³⁰⁶ *Solidago occidentalis* Nutt.)
- (³⁰⁷ *Asclepias Mexicanica* Cav.)
El Toro Canon.
- 18 *Erodium moschatum* L'Her
- 308 (*Musk Tilleary*)
- 14 *Clematis ligiartha*. Nutt.
- 309 *Laguna Canon. Santiago Canon*
- 15 ³¹⁰ *Galium angustifolium*. Nutt
Santiago Canon
- 16 *Briickellia Californiae* J. G.
- 311 ³¹² (*Santiago Canon*)
- 17 *Pelargonium crenulatum*
- 313 (*Lady Washington*)
- 18 *Rhus diversiloba*
- 314 ³¹⁵ (*Poison Oak*) + ³¹⁶ (*Santiago Canon*). (over)

1930⁸ *Chenopodium californicum* var.
Soap Plant

- 20⁹ *Macroseris macrochorda*. Gray
- 21³ *Senecio Douglasii* DC
- 22¹ *Bæeria chrysostoma* F & M (Smooth)
- 23⁵ *Franseria Hookeriana*
- 24³ *Cucita virosa* L. (vales Hemlock)
- 25^{8/14} *Cercocarpus ledifolius* Nutt.
(Mountain C. - wavy) Santiago Can.
- 26⁸ *Cnicus occid.* (Red Thistle)
- (27 *Comma* sp? (Large yellow-spotted))
- 28 *Pentstemon cordifolius* 316
- 29 *Aster occidentalis* Nutt 317
- 30 *adenostoma fasciculatum* H & A 318
- 31 *Jasminum officinale*
(White Jasminine). Gordon 319
- 32 *Drotinum glaucum* 320
Silverado Canon.
- 33 *Chenopodium anthelminticum* 321
(Wormseed)
- 34 *Pluchea camphorata* DC 322
Salt-Marsh Fleabane
- (35 *Centauraea militaris* L
Star Thistle (Sent last year))
- 36 *Zygotea hederacea*
Blue Moon Fl. ex. Gordon 323
- (37 *Clematis ligusticifolia*. Laguna Cen.)
- 38 *Heterotheca grayi* flora Nutt. 324
- 39 *Verbena canescens* (Purple Verbena) Gordon 325
- 40 *Helianthus annuus*. Wild Sunflower 326
Some name as just garden species &
some as Russian sunflowers. but the seeds

seen adjacent.

- 41 *Jasione jasmoides* Garden 3d7
- 42 Flowering Bean. (I do not know the name
but the plant is well worth a place
in the garden. and I mean to plant it. 328)
- 43 *Citrullus vulgaris* var *citrinus*. 329
(Citrone) Grows wild - immense
oblong, pale green, looking like
watermelons. Probably an escape
they are growing along the R.R. track.
the varietal name is my own, for
they are citrini.
- 44 *Medicago sativa*. L. (Alfalfa) 330
- 45 *Lathyrus latifolius* (Perennial)
(Sweet Pea) 331
- 46 *Capricum annuum*. Linn (Chile Peppers) 332
- 47 *Asparagus Sprengelii* (Greenhouse) 332
- 48 *Xanthium canadense* var *echinatum* 333 333
- 49 *Acacia* sp: This is a shrub. I am
not up to acacias, but I hope to some 334
do find a way to know their specific 334
names so we have many here, trees
& shrubs, in fact.
- 50 *Begonia Engelmanni*. (Garden) 335
- 51 *Calochortus splendens* Dengl. 336
(Mariposa Lily) Broth Recd.
- 52 *Rhynchia microstachys*. Greene
Laguna Canon / white forget-me-not 337
- 53 *Atriplex cordata*. Jepson 338
- 54 *Punica granatum*. (Pomegranate) Tull
- 55 *Heteromeles arbutifolia*. (California Holly) Room.)
- 56 *Amaranthus chlorostachys* 339 339
(over)

340

57 Agave americana. (Century Plant)

58 Psidium cattleianum. (Guava) 341

Among these are quite a number where there are very few seeds. These I have made a note of, and will try to get more this summer. Meanwhile they will "hold down the name" as Mrs. Burgek says.

19⁴³ *Baccharis viminea* D. C.
Walter Moley. (a willow like
shrub)

20 *Bæria chrysostoma*.
Smooth

21 *Foeniculum vulgare*.
Fennel. (wild here, probably
escaped.)

22 ⁴⁴ *Hemizonia Heermannii*
Tossed (one of many)

- 11 *Luffa cylindrica* Ruen. 180
"Dishrag" (Garden)
- 12 *Zaegeria erecta*. Marigold (Garden)
- 3 *Plantago lanceolata* Linn. (Native) 182
- 4 *Malva parviflora*. Linn. (Native) 183
- 5 *Sonchus oleraceus*. Linn. (Native) 183
- 6x *Australian Pea* (Garden) 185
- 7 *Izomeres arborea* Nutt. (Native) 186
- 8x *Geranium gonale* (Garden) 187
- 9x "Gillyflowers" (Garden) 188
- 10x *Seabrook* (Garden) 189
- 11 Spotted agave (Garden) 190
- 12x *Persicaria* ? (Native)
- 13 *Brassica campestris* L. (Native)
Wild Turnip. (Looks exactly like mustard)
(but differs in leaves, in seeds
and in seed capsules) 191
- 14 *Brassica nigra* Boiss. (Native)
mustard 192
- 15x *Cupressous macrocarpa* 193
Monterey Cypress
- 16 *Camassia* sp? (small red blossom)
- 17 *Raphanus sativa* L. (Native)
Wild Radish 174
- 18 Onion Lily (Greenhouse) 195
- 19 *Foeniculum vulgare*. Adams. 196
(Native)
- 20x *Layia platyglossa* Gray. "Dicks Lips" (native) 177
- 21x *Rhus integrifolia*. B. & H. (Native)
"Lemonade Berry" 178
- 22 *Picea communis* (Red) (Native)
- 23x " " (Green) (Native) 199
- 24x *Saucer Peach* 201
- 25 "Horse Beans" 200

26 Aprilto. 202

- 27 *Lavatera asurgentifolia* f. ^{ferruginea} Tull. 213
Widely cult - probably introduced
- 28 *Mesembryanthemum crystallinum*
Native. "Ice Plant" 204
- 29 *Datura metel*. (Native) We have
five species, the seeds of which are
alike. There are here besides *metel*,
stramonium and *discolor*.
Another year I shall take pains to
separate them, and will send
them to you as if you wish it. 205
- 30 *Amaryllis Johnsonii* (Red Lily) ²¹⁰ Gordon
- 31 *Lagerstroemia Indica*. (Crape Myrtle.)
- 32 *Olea maculata*. (laurel in greenhouse)
- 33 *Erodium cicutarium*. L. (Native) 207
- 34 *Viburnum tinus*. (Laurestinus) 210
- 35 *Ficus elastica*. (Rubber Tree.) 211
- 36 *Melia azedarach*. (Mimosa Tree) 202
- 37 *Bidens pilosa* = *frondosa* Linn (Native)
- 38 *Nicotiana glauca*. (Tree Tobacco) (Native)
- 39 *Erigeron canadensis*. 210 (Native)
- 40 *Phaseolus* var?
- 41 *Auricaria Bidwillii*. 215
- 42 *Medicago densiflora*. "Bar Clovers" 216
Native. I shelled out enough of these
for a while but they seem to be mislaid.
I will send you more if I can find any -
it is late for them.
- 43 *Richardia speciosa*; (Colla Lily) 217
A poor col., will try and find some better
- 44 *Auricaria Bidwillii*. There are seeds
inside the scales. 215
- 45 *Pinus Coulteri*. 218
- 46 *Opuntia prolifera*. 217 237 217
- 47 *Centauraea melitensis*. (Star Thistle) (Native)
- 48 *Ex Passiflora edulis*. (Passion Flower) 218

- 49 *Yucca whipplei*. Zott. (Native) 249
50 *Opuntia engelmannii*. Prickly Pear
 2 D (Native)
51 *Bigelovia veneta*. Gray. (Native) 221
52 *Chaenactis glabriscula*. (Native) 222
53 *Encelia californica*. (Native) 223
54 *Verbesina sessilis*. (native). Found 224
 by me, not before collected in the U.S.
55 *Melilotis periflora*. (yellow sweet-
 clover. Native)
56 *Asparagus nudoloides*. (8 miles)
57 *Romneya Coulierii*. (Poppy. Native)
58 *Dianthus pusillus*. Michx. 227
 Rattleback. weed. (native)
59 *Asparagus plumosus*. Greenhouse form 229
60 *Lathyrus vestitus*. (wild Sweet Pea) 230
61 ~~Crocus californicus~~. (Native) 231
62 *Eriogonum setigerum*. (Native)
 Turkey mullein. 232
63 *Fragaria californica* (wild strawberry) 233
64 *Asclepias eriocarpa*. (milkweed) 234
65 *Amaranthus albus*. (tumble weed) 235
42 *Medicago denuciflora*. (Bar Clovers) 236
66 *Brodiaea capitata*. 236 236

July 8, 1897.

1

4

- Gutta Percha Singapore
Sea weed from Calif. (piece)
Spines of Sea urchin 5. (3^2 or 3^3)
Butterflies Trochis & Dalias 6^{th}
Sand Dollars incertus? 2
{ Echinorachinus parma 2 or 5?
Sand Dollars 3
Mediterranean 3 Texas
Sea Biscuit small 1
(Sagitta yellow) 1
April 4, 1897. Mrs. E. D. Ramsay
Skate's Eggs 2 No. Weymouth
Silk-worm cocoon
7-pointed Star 1
Medusa 1
Sea-horse 1
Flounder 1 Young Skate No. Weymouth
Sea worms 2 - different
Frilled Stars 2 " "
Red Star
Small Stars 3 All different

- Star Fish 1 Florida Ms. R. Johnson
" " "
Actinia 2 " "
Sea fish skin 1 " "
Fire-shoal 1 E. Island Mass. Ms. L. D.
July 17.

- Lower Jones 12 Islands & Jones
Aug. 27.
Piece of Petrified Wood Mrs. Kohler.
Nov. 20.
Mrs. E. D. Mrs.

- Oct. 28. Sch. Brilliant
Test of Sea-Urchin Oral-Bahamas
Nov. 20. Mrs. C. R. Kira.
Star fish Large, 1 Minton 1897
Sand Worm, stalk 1 Carpenter 1897
Physalia utriculus Sch. & Minton 1897
Polycarpa Man 1897

3

Dec. 12. Miss Goldmark
Pieces from Edafar.

Nov. 20. Mrs. S. D. Hinman sent in specimens into 3	
live Gulf corals & shells	
Sea-weed, 2	Montgomery Bay
Gorgonians 3	"
Fishbone with spine small 3	"
Orange 1	"
Yellow made.	"
Two Tinted shells 1	"
Seaweed & Frathaceous	"

Feb. 25. ¹⁸⁹⁸ Wheeler

Sea-bean Yellow	1
" Red (long)	1
" Gray	1
" Black	1
" Blackened Lusans	2
Coral 1 piece	1
" like Coral but small	2

Greenleaf

3

Apr. 7 3 Red & Black Sea-beans

May 1 Bahama Sea-Pearl

July - Rice Plant among
father's strings

Nov. Greenleaf - ^{Lay opening} small urchin,

" Mrs. Hart. Starfish.

Dec. 15 Mrs. Mc Cormick 3 stones.

{ species Oxydor & Corallina - Gifford &
Gorgonians Gomaria

Mar. 14, 1899. Mrs. E. D. Ramsay

Green Beetles 4 Brazilia

Clay strata from Gasa lead in
glass tube.

Gorgonias reddish

Sawfish Saw (small)

Tamarind pods. 2. *Thespesia*

Pressed Flowers.

Sand from Sahara.

Jaw of Parrot fish

" " ?
Worm tubes.

✓ 1 small piece black jacks
with dolomite - (Broken) Aurora
Spencer.

Jack in mass - Spencer
Lead (Spencer) comes cut off.

From Wagner mine -
Marcasite - find pieces
Lead - Largest piece H.D. *

Find tiny lead crystals with mar-
casite crystals. & Haile

1 Hwy lead crystal &
2 fine groups ^{green} ~~purple~~
Samarth. Vein mine & Haile

gave me
Lignite seed - (Rattan?) &
All from Mississippi

Mar. 17. 1903 Mrs. E. D. Ramsay
Large Starfish - West Indies?
3 sea urchins ^{green} coral & oyster
2 in sponge shells (one broken)

Sea urchin very small 1 1/2
Sand Dollar tiny 1 1/2

Mr. Whelby
May 1899. Flat fish from banks 3 M. I.
August 1899. Tiny stars ^{Purple & white} ~~white~~ 10

Dec. 1899. W. I. 3
Mica (crystalline) ^{green} Phlogopite 5
Apatite (crystalline) 1

June 1899. Mrs. E. D. Ramsay
Mollusca 3 dead

^{So. Carolina & Minn} gave me & Spencer

July 1900. Sea Urchins alive 5th
5 to 10. Stars (quite a number) tiny me

urchins

July 13 to 30. 1900 S. Orleans.

Worm tubes? or coral 3 & 4 sp. 3

Spiraea - one? or more sp.?

Sand dollars alive many
dead "

6 East Orleans Mass

July 1901 Urchin dead
several very small
Stars three or four tiny one
good large live one.
Crabs bright red 10
Coral crimson red 1
and long claws.
Claw of another crab? Burn

Oct. 1901 Mrs. Bradshaw
Strange st species have kept 3 sp.

Coral - two species

M.J.B. 1901 Urchin Newport Bay Cal. 4
" Arch Beach 2
Sand dollars Newport Cal. 6

June 1901 Mrs. H. B. Starn
Purple encrusting egg coral clump 1
Large Barnacle 1

July 1901 E. Orleans

Horseshoe crabs -

Sept. 1901. 2 Sea urchins large with spines
E. Orleans. V. L. Johnson

Oct. 1901 - arrowhead - Mrs. Whitney carriage -
(June 16, 1902) Melitaea Dr. Hill (dead) 10
S. Carolina Mrs. E. D. Ramsay

" " Sharks' teeth fossil? 1
Mrs. C. D. Ramsay about 50

Oct. 1901 Fossil Shell best Mrs. Whitney
Dec. " " corals largest Harold
" " " " corals medium Spence.

Oct 1901 - Large white Arrow head Mrs. Whitney

1901 - 3 pieces pod of cocoas Miss Brad
Some cocoas sand
3 iron nits.

Left to Jan 1902 From the Phoenix mine.
Dark small crystals - Large piece $\frac{1}{2}$ by $\frac{1}{2}$
" larger " - small piece
From Phoenix Min. Prospect, Mo
3 pieces silicate from
Prospect, Mo. dark green
Calcareous - some picked up;
Calcite 1 large & several pieces from
aurora Mo - Spence. One

June 1913. Fossils from Texas
from Mrs. J. G. Bennett (Eugene)
(human skull and broken arrowhead)

(9)

Jan. 28, 1903.

Litchi Nuts -

Chinese Knot Seeds (2 kinds
one each.)

" fruit. 1

" food 3 kinds.

Chinese Tea in bundles. M. E. L.

Sapodilla seed S. Am. M. G. D.

Pulse Lyria "

Ground Wheat "

Lentiles "

June 19th Chinese Sacred Candy! M. E. L.

" Nut similar to litchi! "

Spodumene Sterling Mass.

June, 1903.

Pescadero Stones M. G. Day
Pescadero, Calif.

10 March. 14, 1906.

Histaria consequana Benth. Chinese Histaria.

Gleditschia triacanthos L.

Three-thorned Acacia, or Honey Locust.

Catalpa bignonioides Walt.

Catalpa. Indian Bean.

Aristolochia Liph., Lher.

Pipe-Vine. Dutchman's Pipe.

Box of 14 fine specimens from W. S. Hin Sept 1907.

Piece of glass (iridescent) from
Spanish galleon-sunk in Caribbean Sea
about a hundred years ago. The
glass was brought up from the wreck
after it had been under water forty
years, Mr. Thos. Freeman who a boy, at-
tained it from the vessel that went to ex-
plore the wreck hoping to find treasure and
which was, in turn, wrecked off Manaus
Brazil on the return trip. July 1907.

Sand from Block Island M. G. D.

3 agates from Pugt Ld. M. G. Day Aug 1907.

2 Sharks(?) eggs and 1 Skates Egg ^{Collected July 1907}

Dec. 1907. M. F. B.

Lemis - about 15 sp.

Lorinus lanceolata Bull Thistle.

Euphorbia splendens. Crown of Thorns.

White Jasminie Pods

Megarrhiza marah. Skeleton of the
Chilicotherus Bear.

Lichens from Big Trees

Bracts from Bamboo - in garden.
(Feather Moss - given to Mrs. Ruggles)

Linen Moss

Starfish. Larger than any I had.

Mussel - (*Mystiles cal.*?)

Corona Polka.

June, 1911. Brown scallop, with
a red scar, from J. E. C. One of the
true eye beans.

Tiny piece here - Harold.
Miamis Blanket Diamond Co.

Rhenish — Jack
Silexite w.s.n.

(Baltic) Fine lead (several pieces)
& good mines situated Scandia

Vagner? Marcasite & lead
largest
Carterville or Webb City

Atlas —

Monza Spines Calcite
' large pieces "
(Dolomite & Jack)

30
Tropical America
Tropical & Subtropical

Wetland - 55%
Forest - 25%
Grassland 10%
Shrubland 10%

Flowers,
Foxglove, bell-shaped
Iris, Orchid, yellow
Daffodil, yellow bell
Lily, yellow bell
Hollyhock, bell-shaped
Saxifrage, bell-shaped
Clematis, bell-shaped
Lavender, bell-shaped

Plant families - most abundant
Papaveraceae (Milkweed),
Compositae (Asteraceae),
Legume, Malvaceae, also,
Moss families - great variety
Loranthaceae, also.

Lake & 2 miles North of R.
Alabama Cross Alabama River
Tufa Formations
Sedimentary Igneous W. of
The Valley Carolina Shales
Calcareous Shale Springfield P.W.
" " " " " " " " " "
" " " " " " " " " "
" " " " " " " " " "
" " " " " " " " " "

Flint Hill Sh.
Igneous Intrusive Sh. W.
Second Layer of Igneous 2
Boulders of Igneous
Fuchsite Gneiss 10.
Single mica Schist Sh.
Gneissic Cryst. Schist very
Sulfuriferous Sulfuriferous
Aluminous Rock - Tuffaceous 2
North of R.

Spodumene

Fluorite Sulfuriferous W. of

D. M. Webb Product of Franklin
Green Co. N. J.

Ceballo

Pip. St. Minn.

Nraunlite Arkansas

Saltpetre Crystal

Mefia Lava Crystal

Blue Tit'le Cox So 4

Lava

Geoperites Yellowish Pink Montana

Vanierogated Marble Plymont Vt.

Prehnite 3 Somerville

Garnet 5 Dedham Mass.

" Hallowell N. Y.

" Reading Penn.

Pseudomorphs 9 - Specimen

Limestone Boston Mass.

Marie Spain " "

Limestone Boulder " "

" Canandaule Pa.

Owyhee 2

Actinolite like Burleigh Cr.

Actinolite Cavendish Vt

Amphibole Franklin R. I.

Hornblende Roxbury Mass.

Anthophyllite Gorham N.H.

Black Quartz Dutch Flat Cal.
or Col
Crossed Dimples Wilmette Ill. N.W.
Milky " "
Rose " "
" Potters Smoky " "
Smoky " Wilmette "
Cryst. " "
Pinkish Mt Pleasant

Quartz Rock N. Adams.
Granulated L. Wilmette
Milky 2 Wilmette
Ridge " "

Prescott "

Smoky "

Black Dutch Flat Leaf
Springfield Park Lake River
Flint Petoskey Mass.

Carnelian Pebbles	2 U.S.	<u>3 Grades</u>
"	12 Miss. R.	Part of G. Alden Iowa
Carnelian Polished		" Keokuk Iowa
Agates	3. Rocky Mt. Mts.	Grade .. "
Agate		Chalcedony G. " "
Amethyst Lake Superior	2	<u>4 Asbestos</u> S. L. D. H.
" Wore S.		" Staten Id. N. Y.
" Amst M.		" Italy
<u>2 Pumice</u>		Mineral Wool Colorado
Quartz Crystals		Asbestos? Cent Ar.
" "		or Pumice?
" " Gorham N. H.		" Mt. K. Wall Park
" Hot Spring Ark.		Pumice? Central Ar.
Silvery 2. Crystals	Mr. M.	<u>5 Magnetite</u> Marin
Part of Crystal Bridgeville W. Va.		"
2. Crystals Herkimer Co. N.Y.	Texas	Hematite Pierpont N. J.
Garnet Sand	Marble Head	" Ery.
Iron Sand	Brents	Micaeous N. Colorado

Friable Steatite Rose Mass.

Steatite " "

Talc Lincoln R. I.

Talc? " "

Talc Rose Mass

" Spar F. Lawrence Co N. Y.

Silverado Mine 2 lbs.

Carbonate crystals 2 Wats.

Abreidum Yellow Fine P.R.

Epidote crystals Sugar Hill

2 N.Y.

Copper?

Diamond Drill Core. Meek

Gay Head Clay Aunt M.

Trad - Stony Gengelton Mass.

Scapolite? Roxbury Mass

" ? with Apatite? " "

Anorthos Earth Labrador

Green Feldspar Rock Hill

Boltonite with Sillimanite

Bolton

Chlorite-calcite Lebelvista

Steatite W. Greenland

" Plymouth H.

Mica Muscovite Wilmett Ill

Marble White V. Adams

Mica Plumbus) Wilmett

Epidote? Lime H.

Black Mica (Biotite) R. I. S.

Dendrite on Limestone Smithfield

Jasper. Saugus. Mass

" Berlin N. H. 5

Diatomaceous Earth Richmond

" Plymouth

Graphite

Breccia

Dendrite on Argillite 2

" Leptognite Plymouth Ct.

Seneca Sandstone Darlington

Md.

E. L. K.